



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

20NR-04

Job Sheet 191264



Part No: 20NR-04

Job Qty: 6 pcs

Part Name: Solenoid



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/25/19

Job Tracking No:

Due Date: 5/10/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG 20NR-04 Rev 6 IPP Rev A 18.02.02 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Small Fab - 1	6 pcs	5/10/19	5/10/19	0.00	0.60	External Load - 1		AP 2019/03/07
							External Load - 2		
							External Load - 3		
							Small Fab - 1		
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
110	QC 5	6 pcs	5/10/19	5/10/19	0.00	0.00	QC 5 - 10		DAS MAR 11 2019 68 9-89
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 42		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
130	Packaging 3-2 - Stock - B4B	6 pcs	5/10/19	5/10/19	0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S160173



Part: 20NR-04

Job No: 191264

Serial No/Batch: S160173

Revision: 6

Inspector:

Exp Date:

Instructions:

Date: 03/07/19

Plex 3/7/19 10:07 AM Dart.Hadley.Shannon

				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	DAS
				Packaging 3 - 7 - B4B	28
				Packaging 3 - 8 - B4B	9-89
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140	QC 21 - FG	6 pcs	5/10/19	0.00 0.00	QC 21 - FG - 21
					QC 21 - FG - 70
					QC 21 - SA - 53
Part Op 100 - (Small Fab)1-Assemble as per DWG sheet 1. 2-Center 20NR-03 in shaft of solenoid as per note 1. ***Note 32446 Descriptions: 22-16 crimp connectors supplied loose as per note 2*** 110 - (QC5- Inspect part completeness to step on W/O) 130 - (Identify as per dwg & Stock Location: _____)Bag and tag 140 - (QC21- Final Inspection - Work Order Release)					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
20NR-04-1	Solenoid	6 pcs (1 ea)	100-Small Fab - 1	S158694	
20NR-04-3	Spacer	6 pcs (1 ea)	100-Small Fab - 1	S144705	
32446	Crimp Terminal	12 Ea (2 ea)	100-Small Fab - 1	S090924	
92383A695	Slotted Spring Pin	6 Ea (1 ea)	100-Small Fab - 1	S040831	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-Small Fab - 1	20NR-04-1	6	18	0	
	20NR-04-3	6	16	0	
	32446	12	746	0	
	92383A695	6	85	0	
Part Specifications					
Specifications could not be found.					



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Job Created: 2/25/19

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Due Date: 5/10/19

Created By: Marie Lajeunesse

Type: SOLD

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Note: DWG 20NR-04 Rev 6 IPP Rev A 18.02.02 New issue DP Verify DD

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							Small Fab - 2		
							Small Fab - 3		
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							Small Fab - 7		
110	QC 5	6 pcs	5/10/19		0.00	0.00	QC 5 - 10		
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							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 42		
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							QC 5 - 58		
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130	Packaging 3-2 - Stock - B4B	6 pcs	5/10/19		0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		

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				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140	QC 21 - FG	6 pcs	5/10/19	0.00 0.00	QC 21 - FG - 21
					QC 21 - FG - 70
					QC 21 - SA - 53

Part Op **100** - (Small Fab)1-Assemble as per DWG sheet 1. 2-Center 20NR-03 in shaft of solenoid as per note 1. ***Note 32446
 Descriptions: 22-16 crimp connectors supplied loose as per note 2***
110 - (QC5- Inspect part completeness to step on W/O)
130 - (Identify as per dwg & Stock Location: _____)Bag and tag
140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
20NR-04-1	Solenoid	6 pcs (1 ea)	100-Small Fab - 1	5158694
20NR-04-3	Spacer	6 pcs (1 ea)	100-Small Fab - 1	5144706
32446	Crimp Terminal	12 Ea (2 ea)	100-Small Fab - 1	5090924
92383A695	Slotted Spring Pin	6 Ea (1 ea)	100-Small Fab - 1	5040831

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Small Fab - 1	20NR-04-1	6	0	0
	20NR-04-3	6	6	0
	32446	12	804	0
	92383A695	6	85	0

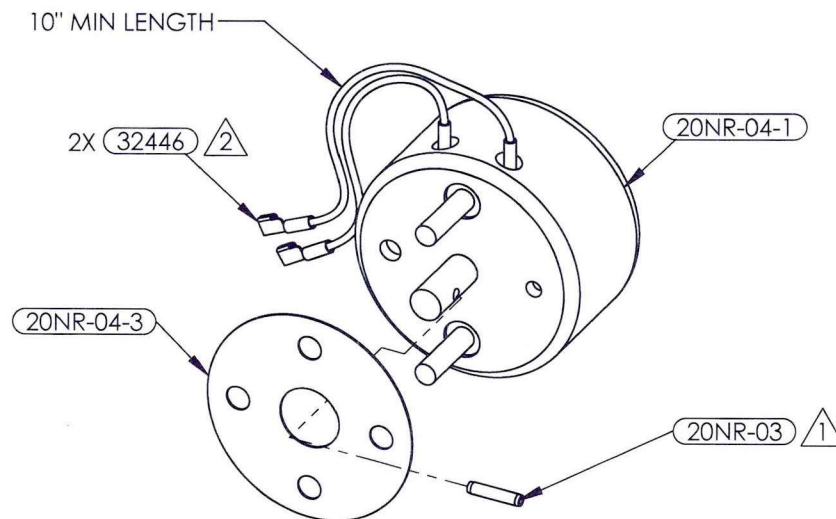
Part Specifications

Specifications could not be found.

Plex 2/25/19 3:11 PM Dart.lajeunesse.marie

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
5		AS DRAWN BY CANAM.	7/18/2013	CFS
6	14-0206	CH'D TITLEBLOCK WAS RED BARN IS DART. 20NR-04-1 ADDED ENGRAVE BATCH # NOTE. ADDED 20NR-04-3 SPACER, 2X 32446 CONNECTORS. ADDED MIN LENGTH NOTE.	11/3/2014	DPD
				JAG



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

191264 M.C.S.
1902-26

NOTE:

- 1 CENTER 20NR-03 IN SHAFT OF SOLENOID.
2 CONNECTORS SUPPLIED LOOSE.

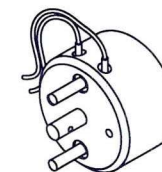
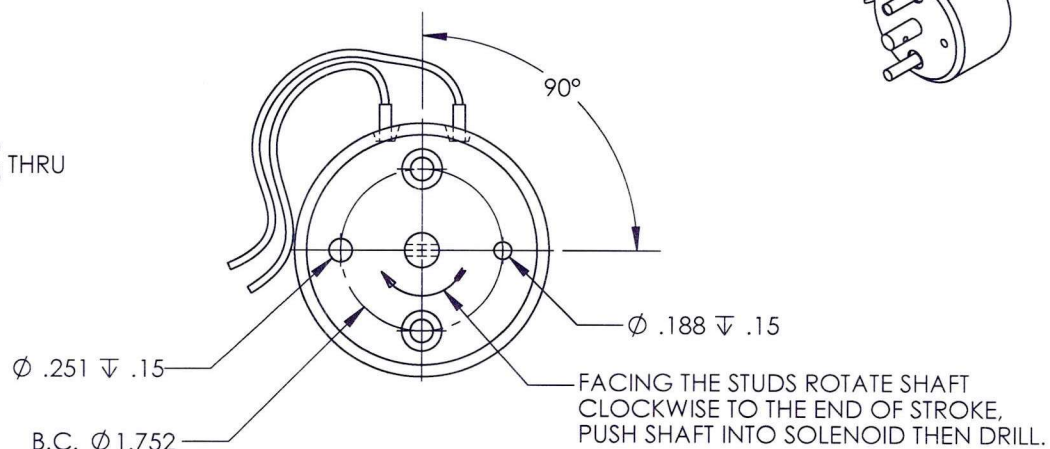
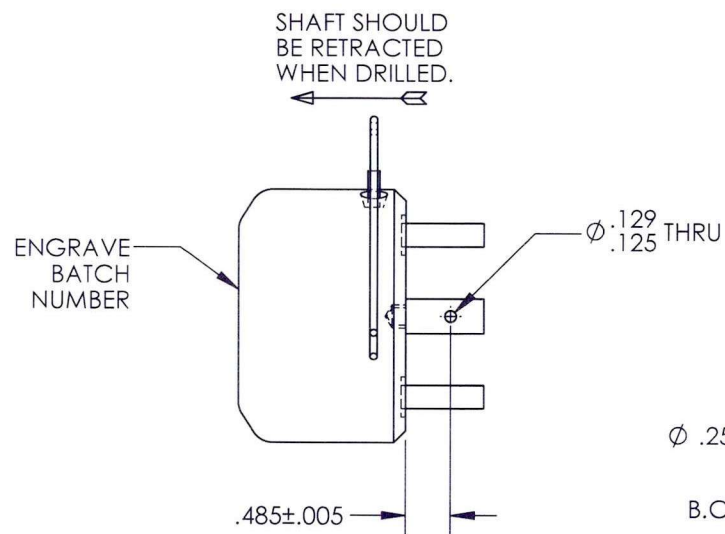
USED ON
20NR
8NR

DART AEROSPACE	
TITLE SOLENOID ASSEMBLY	
DWG NO. 20NR-04	REV 6
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: CANAM APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 12/1/1998
SHEET 1 OF 3	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
		B/O	20NR-03	1	SOLENOID PIN	S.S.	Ø1/8 X 5/8 MCMaster-CARR #92383A695	1
		B/O	20NR-04-1	1	SOLENOID		H-1127-020 (MODIFIED)	2
			20NR-04-3	1	SPACER	PETG	Ø2-5/8 X .020	3
		B/O	32446	2	22-16 AWG KNIFE CONNECTOR		ALLIED ELECTRONICS 32446	1

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6	14-0206	20NR-04-1 ADDED ENGRAVE BATCH # NOTE.	11/3/2014	DPD	JAG



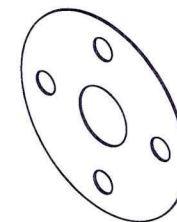
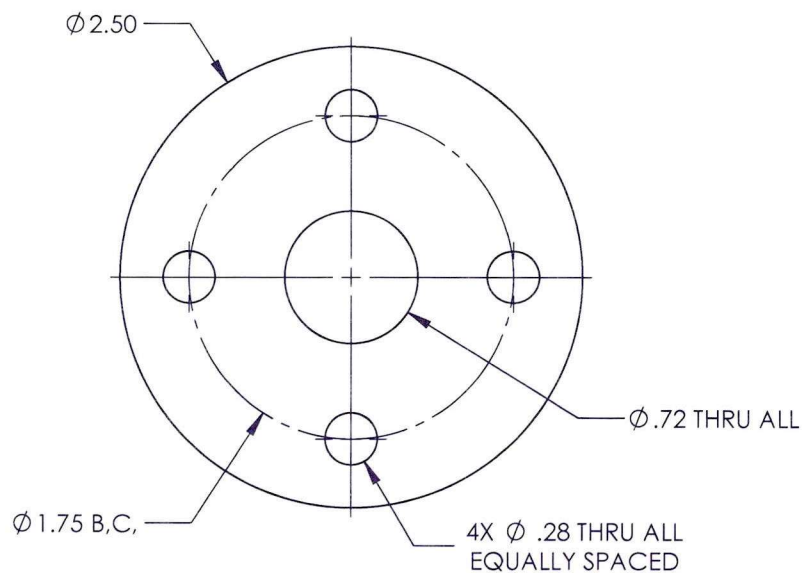
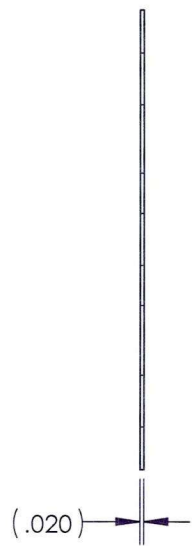
20NR-04-1

SOLENOID

DART AEROSPACE	
TITLE SOLENOID	
DWG NO. 20NR-04-1	REV 6
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX $\pm .005$.XX $\pm .01$.X $\pm .1$ FRACTIONS $\pm 1/8$ ANGLES $\pm .5^\circ$	DRAWN BY: CANAM APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 12/1/1995
SHEET 2 OF 3	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0206	20NR-04-3 ADDED SPACER.	11/4/2014	DPD	JAG ,



20NR-04-3

SPACER

DART AEROSPACE	
TITLE SOLENOID	
DWG NO. 20NR-04-3	REV 6
MAT'L PETG	DRAWN BY: CLOUGH
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT
.XX ± .01	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:1	DATE 10/30/2012
SHEET 3 OF 3	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					